

# GLOSSARY

**ABIOTIC:** The nonliving, material (as opposed to conceptual) components of the environment, such as air, rocks, soil, water, coal, peat, and plant litter. Also see BIOTIC.

**ACCELERATED SOIL EROSION:** Soil loss above natural levels resulting directly from human activities. Because of the slow rate of soil formation, accelerated erosion can permanently reduce plant productivity.

**ACQUIRED PUBLIC LANDS:** Lands in federal ownership that the government obtained as a gift or by purchase, exchange, or condemnation. Also see PUBLIC LANDS.

**ACRE-FOOT:** A volume that covers an area of 1 acre to a depth of 1 foot (43,560 ft<sup>3</sup>).

**ACTIVE MANAGEMENT AREAS:** Five areas in Arizona (i.e., Prescott, Phoenix, Pinal, Santa Cruz, and Tucson) where the Arizona Department of Water Resources regulates groundwater use. Groundwater regulations stem from the 1980 Arizona Groundwater Management Code which provides the management framework to ensure dependable water supplies for Arizona well into the future. Ensuring dependable supplies, the code places conservation requirements on municipal and agricultural water use and promotes the use of renewable supplies, such as Colorado River water delivered by the Central Arizona Project. Also see TUCSON ACTIVE MANAGEMENT AREA.

**ACTIVITY PLAN:** A detailed and specific plan for managing a single resource program or plan element undertaken, as needed, to implement the more general resource management plan (RMP) decisions. BLM prepares activity plans for specific areas to reach specific resource management objectives within stated time frames.

**ADAPTIVE REUSE:** Repairing or remodeling a historic structure so that it can be used for purposes other than those for which it was originally built.

**ADMINISTRATIVE USE OF MINERAL MATERIALS:** BLM's use of mineral materials from public land for land management projects.

**ADVANCED ECOLOGICAL STATUS:** A condition that is considered to be achieved when the existing vegetation community on a defined ecological site has a high correlation to the potential natural community for that site (i.e., ecological site rating > 50). These conditions are determined from ecological site inventories using the Natural Resource Conservation Service (NRCS) ecological site guides to compare the existing vegetation communities on each ecological site to the potential plant community for that site. Achieving an advanced ecological status is assumed to be an expression of the physical and biological condition or degree of function needed to sustain a healthy rangeland ecosystem.

**AGGREGATE:** Uncrushed or crushed gravel, crushed stone or rock, sand, or artificially produced inorganic matter that forms the major part of concrete.

**AIR QUALITY RATING:** See CLASS I AIR QUALITY RATING and CLASS II AIR QUALITY RATING.

**AIRSHED:** The atmospheric zone potentially influenced by air pollutants from various sources.

**ALLOTMENT:** An area of one or more pastures where one or more operators graze their livestock. An allotment generally consists of federal rangelands, but may include

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intermingled parcels of private, state, or federal lands. BLM stipulates the number of livestock and season of use for each allotment.

### **ALLOTMENT MANAGEMENT PLAN**

**(AMP):** A livestock grazing management plan dealing with a specific unit of rangeland and based on multiple use resource management objectives. The AMP considers livestock grazing in relation to other uses of rangelands and to renewable resources--watershed, vegetation, and wildlife. An AMP establishes the seasons of use, number of livestock to be permitted on rangelands, and the range improvements needed.

**ALLUVIAL FAN:** A low, outspread, relatively flat to gently sloping mass of sediment, shaped like an open fan and deposited by a stream where it flows from a narrow mountain valley onto a plain or broad valley.

**ALLUVIUM:** Any sediment deposited by flowing water as in a riverbed, floodplain, or delta.

**AMALGAMATION PAN:** A circular, cast-iron pan in which gold or silver ore is ground and the precious metal particles are amalgamated when mercury is added.

**ANIMAL UNIT:** One mature (1,000 pound) cow or the equivalent based upon an average daily forage consumption of 26 pounds of dry matter per day.

**ANIMAL UNIT MONTH (AUM):** The amount of forage needed to sustain one cow, five sheep, or five goats for a month.

**ANNUAL PLANT:** A plant that completes its life cycle and dies in one year or less. Also see PERENNIAL PLANT.

**APICAL MERISTEM:** Area of undifferentiated plant tissue at the tip of the root or shoot from which new cells arise; growing point at the tip of the root or stem in vascular plants.

**AQUATIC HABITATS:** Habitats confined to streams, rivers, springs, lakes, ponds, reservoirs, and other water bodies.

**AQUIFER:** A water-bearing bed or layer of permeable rock, sand, or gravel capable of yielding large amounts of water.

**AQUIFER RECHARGE:** The adding of water to an aquifer, a process that occurs naturally from the infiltration of rainfall and from water flowing over earth materials that allow it to infiltrate below the land surface.

**AREA OF CRITICAL ENVIRONMENTAL CONCERN (ACEC):** A designated area on public lands where special management attention is required: (1) to protect and prevent irreparable damage to fish and wildlife; (2) to protect important historic, cultural, or scenic values; or other natural systems or processes, or (3) to protect life and safety from natural hazards.

### **ARIZONA STANDARDS FOR RANGELAND HEALTH AND GUIDELINES FOR GRAZING**

**ADMINISTRATION:** Standards and guidelines developed collaboratively by BLM and the Arizona Resource Advisory Council (RAC) to address the minimum requirements of the Department of the Interior's final rule for Grazing Administration, effective Aug. 21, 1995.

**ASPECT:** See VISUAL ASPECT.

**AVAILABLE FORAGE:** ~~Forage that can be grazed and still allow sustained forage production on rangeland. Available forage may or may not be authorized for grazing.~~

**BAJADA:** A broad continuous slope extending along and from the base of a mountain range and formed by coalescing alluvial fans.

**BAR:** A ridgelike accumulation of sand, gravel, or other alluvial material formed in the channel, along the banks, or at the mouth of a stream where a decrease in velocity induces deposition. Also see WATER BAR.

**BASE FLOW (DISCHARGE):** The portion of stream discharge derived from such natural storage sources as groundwater, large lakes, and swamps but not derived from direct runoff or flow from stream regulation, water diversion, or other human activities.

**BASE HERD:** The constant livestock herd size that is continually licensed but may not be the same as the grazing (carrying) capacity. Also see GRAZING CAPACITY.

**BASE LEVEL:** The lowest level to which a land surface can be reduced by the action of running water.

**BASE METAL:** A metal inferior in value to gold and silver; a term generally applied to the commercial metals such as copper and lead.

**BASIN (INTERMONTANE BASIN):** A broad structural lowland between mountain ranges, commonly elongated and many miles across.

**BIOLOGICAL ASSESSMENT:** Information prepared by or under the direction of a federal agency to determine whether a proposed action is likely to: (1) harm threatened or endangered species or designated critical habitat, (2)

jeopardize the existence of species that are proposed for listing, or (3) adversely modify proposed critical habitat. Biological assessments must be prepared for major construction activities. The outcome of a biological assessment determines whether formal Section 7 consultation or a conference is needed. Also see BIOLOGICAL EVALUATION.

### **BIOLOGICAL DIVERSITY**

**(BIODIVERSITY):** The full range of variability within and among living organisms and the ecological complexes in which they occur. Biological diversity encompasses ecosystem or community diversity, species diversity, and genetic diversity.

**BIOLOGICAL EVALUATION:** The gathering and evaluation of information on proposed endangered and threatened species and critical and proposed critical habitat for actions that do not require a biological assessment. Also see BIOLOGICAL ASSESSMENT.

**BIOLOGICAL OPINION:** A document that includes the following: (1) the opinion of the U.S. Fish and Wildlife Service or the National Marine Fisheries Service as to whether a federal action is likely to jeopardize the existence of a species listed as threatened or endangered or destroy or adversely modify designated critical habitat, (2) a summary of the information on which the opinion is based, and (3) a detailed discussion of the effects of the action on listed species or designated critical habitat.

**BIOLOGICAL PLANNING PROCESS:** The process proposed by Alternative 2 of this plan and EIS, by which a Biological Planning Team would: (1) determine the current health and trend of rangeland resources in the Empire-Cienega Planning Area, (2) evaluate proposed grazing and recreation actions in light of

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resource conditions and concerns and objectives of the Empire-Cienega Integrated Resource Management Plan, and (3) recommend to BLM annual authorizations for livestock grazing and changes to recreation authorizations or site uses.

**BIOLOGICAL PLANNING TEAM:** Under Alternative 2 of this plan and EIS, a team that would meet at least twice a year to: (1) determine the current health and trend of rangeland resources in the Empire-Cienega Planning Area, (2) evaluate proposed grazing and recreation actions in light of resource conditions and concerns and objectives of the Empire-Cienega Integrated Resource Management Plan, and (3) recommend to BLM annual authorizations for livestock grazing and changes to recreation authorizations or site uses. The proposed Biological Planning Team would consist of a balance among resource managers, resource users, and people concerned about proper resource management.

**BIOMASS:** The total amount of living matter in a given unit of the environment.

**BIOTIC:** Pertaining to life or living; the living components of the environment. Also see ABIOTIC.

**BLM SENSITIVE SPECIES:** See SENSITIVE SPECIES.

**BOSQUE:** A woodland dominated by trees more than 15 feet tall.

**BRAIDING:** A pattern of an interlacing or tangled network of several branching and reuniting stream channels separated by branch islands or channel bars.

**BROWSE:** The part of leaf and twig growth of shrubs, woody vines, and trees available for animal consumption.

**CANDIDATE SPECIES:** Species not protected under the Endangered Species Act, but being considered by the U.S. Fish and Wildlife Service for inclusion on the list of federally threatened and endangered species.

**CANOPY:** The cover or leaves of branches formed by the tops or crowns of plants as viewed from above the cover, measured by the vertical projection downward of the extent of the cover and expressed as a percentage of the ground so covered.

**CARBON-14 DATING:** A method of estimating the age of an artifact containing carbon by measuring the radioactivity of its carbon-14 content to determine how long ago the specimen was separated from equilibrium with the atmosphere-plant-animal cycle. Continuously produced in the atmosphere by cosmic-ray bombardment, carbon-14 decays with a half-life typically described as 5,568 years. An object is dated by comparing its carbon-14 activity per unit mass with that in a contemporary sample.

**CARRYING CAPACITY (WILDLIFE):** The most animals a specific habitat or area can support without causing deterioration or degradation of that habitat. Also see GRAZING CAPACITY.

**CASUAL USE (MINING):** Mining that only negligibly disturbs federal lands and resources and does not include the use of mechanized earth moving equipment or explosives or motorized equipment in areas closed to off-highway vehicles. Casual use generally includes panning, nonmotorized sluicing, and collecting mineral specimens using hand tools.

**CASUAL USE (RECREATION):** Noncommercial or nonorganized group or individual activities on public land. **Complies**

with land use decisions and designations, i.e., Special Area Designations, does not award cash prizes, is not publicly advertised, poses minimal risk for damage to public land or related water resource values, and generally requires no monitoring. If the use goes beyond those conditions, the activity should be treated as any other organized recreational group or competitive activity or event for which BLM would require the event organizer to obtain an SRP.

#### **CASUAL USE OF MINERAL**

**MATERIALS:** Extracting mineral materials for limited personal (noncommercial) uses.

**CATEGORICAL EXCLUSION:** A category of federal actions that do not individually or cumulatively have a significant effect on the human environment and for which neither an environmental impact statement nor an environment assessment is required.

**CATTLE YEAR-LONG (CYL):** The amount of forage needed to sustain one cow for a 1-year period. One CYL equals 12 animal unit months (AUMs). Also see ANIMAL UNIT MONTH.

**CERARGYRITE:** Horn silver. Silver chloride (AgCl) which contains 75% silver.

**CERUSSITE:** A lead carbonate ( $PbCO_3$ ).

**CHAINING:** A mechanical vegetation treatment in which two tractors drag an anchor chain extended between them over the terrain to uproot brush and small trees.

**CHANNEL:** A natural or artificial watercourse with a definite bed and banks to confine and conduct continuously or periodically flowing water.

**CHANNEL MORPHOLOGY:** The structure and form of a stream channel.

**CIENEGA:** A marshy or swampy area where the ground is wet due to the presence of seepage or springs.

**CLASS I AIR QUALITY RATING:** Under the Clean Air Act, the rating given areas of the country selected to receive the most stringent degree of air quality protection. Also see CLASS II AIR QUALITY RATING.

**CLASS II AIR QUALITY RATING:** Under the Clean Air Act, the rating given areas of the country selected for somewhat less stringent protection from air pollution damage than Class I areas, except in specified cases. Also see CLASS I AIR QUALITY RATING.

**CLIMAX:** A plant community's final and highest ecological development which emerges after a series of successive vegetational stages. The climax community perpetuates itself indefinitely unless disturbed by outside forces. Also see DISCLIMAX.

**COLONIZATION:** Occupation of an area by a group of organisms which previously did not occupy the area.

**COMMUNITY:** A collective term used to describe an assemblage of organisms living together; an association of living organisms having mutual relationships among themselves and with their environment and thus functioning at least to some degree as an ecological unit.

**CONSERVATIVE STOCKING RATE:** A stocking rate 15 to 25% below grazing capacity. Also see STOCKING RATE and GRAZING CAPACITY.

**CONSERVATION EASEMENT:** An easement to assure the permanent preservation of land in its natural state or in whatever degree of naturalness the land has when the easement is granted. Also see EASEMENT.

**COOL-SEASON PLANTS:** Plants whose major growth occurs during the late fall, winter, and early spring. Also see WARM-SEASON PLANTS.

**COOPERATIVE MANAGEMENT AGREEMENT:** A document that describes agreements made between BLM and the public on adjusting grazing use. This document also defines the specific adjustments and the schedule of adjustments (usually over a five-year period).

**CORRIDOR:** See DESIGNATED CORRIDOR.

**COVER:** (1) Plants or plant parts, living or dead, on the surface of the ground; (2) Plants or objects used by wild animals for nesting, rearing of young, escape from predators, or protection from harmful environmental conditions.

**COW-CALF LIVESTOCK OPERATION:** A livestock operation that maintains a base breeding herd of mother cows and bulls. The cows produce a calf crop each year and the operation keeps some heifer calves from each calf crop for breeding replacements. Between the ages of 6 and 12 months, the operation sells the rest of the calf crop along with old and nonproductive cows and bulls.

**CRETACEOUS:** In geologic history the third and final period of the Mesozoic era, from 144 million to 65 million years ago, during which extensive marine chalk beds formed.

**CRITICAL HABITAT, DESIGNATED:** Specific parts of an area that are occupied by a federally listed threatened or endangered plant or animal at the time it is listed and that contain physical or biological features essential to the conservation of the species or that may require special management or protection. Critical habitat may also include specific areas outside an area occupied by a federally listed species if the Secretary of the Interior determines that these areas are essential for conserving the species.

**CROSSING LANE:** A fenced corridor that allows livestock to cross a stream without spreading out into the water.

**CULTURAL RESOURCE (CULTURAL PROPERTY):** A location of human activity, occupation, or use identifiable through field inventory, historical documentation, or oral evidence. Cultural resources include archaeological, historical, or architectural sites, structures, or places with important public and scientific use. Cultural resources may include definite locations of traditional, cultural or religious importance to specified social or cultural groups.

**CULTURAL RESOURCE DATA:** Cultural resource information embodied in material remains and manifested in studies, notes, records, diaries, analyses, and published and unpublished manuscripts.

**CULTURAL RESOURCE DATA RECOVERY:** The professional application of archaeological techniques of controlled observation, collection, excavation, and/or removal of physical remains including analysis, interpretation, explanation, and preservation of recovered remains and associated records in an appropriate curatorial facility used as a means of protection. Data recovery may sometimes

employ professional collection of such data as oral histories, genealogies, folklore, and related information to portray the social significance of the affected resources.

**CULTURAL RESOURCE INVENTORY**

**(SURVEY):** A descriptive listing and documentation including photographs and maps of cultural resources. Included in an inventory are the processes of locating, identifying, and recording sites, structures, buildings, objects, and districts through library and archival research, information from persons knowledgeable about cultural resources, and on-the-ground surveys of varying intensity.

**Class I:** A professionally prepared study that compiles, analyzes, and synthesizes all available data on an area's cultural resources. Information sources for this study include published and unpublished documents, BLM inventory records, institutional site files, and state and National Register files. Class I inventories may have prehistoric, historic, and ethnological and sociological elements. These inventories are periodically updated to include new data from other studies and Class II and III inventories.

**Class II:** A professionally conducted, statistically based sample survey designed to describe the probable density, diversity, and distribution of cultural properties in a large area. This survey is achieved by projecting the results of an intensive survey carried out over limited parts of the target area. Within individual sample units, survey aims, methods, and intensities are the same as those applied in Class III inventories. To improve statistical reliability, Class II inventories may be conducted in several phases with different sample designs.

**Class III:** A professionally conducted intensive survey of an entire target area aimed at locating and recording all visible cultural properties. In a Class III survey, trained observers commonly conduct systematic inspections by walking a series of close-interval parallel transects until they have thoroughly examined an area.

**CULTURAL RESOURCE PROJECT**

**PLAN:** A detailed design plan for cultural resource projects such as structure stabilization, research efforts, interpretive development, and restrooms. These plans include estimates on workforce, equipment, and supply needs.

**CUMULATIVE IMPACTS:** Impacts that result from the incremental changes from all planned actions when added to other past, present, and reasonably foreseeable changes. Cumulative impacts can also result from individually minor, but collectively significant actions taking place over time.

**CYPRINID:** Any of a family (Cyprinidae) of freshwater fishes that include the carps and minnows.

**DATA RECOVERY:** See CULTURAL RESOURCE DATA RECOVERY.

**DECISION RECORD:** A manager's decision on a categorical exclusion review or an environmental assessment. Comparable to the record of decision for an environmental impact statement, the decision record includes: (1) a finding of no significant impact, (2) a decision to prepare an environmental impact statement, or (3) a decision not to proceed with a proposal. Also see RECORD OF DECISION.

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### **DEFERRED ROTATION GRAZING:**

Moving grazing animals to various parts of a range in succeeding years or seasons to provide for seed production, plant vigor, and seedling growth.

### **DESIGNATED CORRIDOR:**

BLM's preferred route for placing rights-of-way for utilities (i.e., pipelines and powerlines) and transportation (i.e., highways and railroads).

### **DESIRED PLANT COMMUNITY:**

The plant community that has been determined through a land use or management plan to best meet the plan's objectives for a site. A real, documented plant community that embodies the resource attributes needed for the present or potential use of an area, the desired plant community is consistent with the site's capability to produce the required resource attributes through natural succession, management intervention, or a combination of both.

**DETRITAL COVER:** Cover that consists of dead organic matter.

**DETRITUS:** Disintegrated matter, such as rock fragments or organic debris accumulated in pond water, mud, or soil.

**DIKE:** An upright or steeply dipping sheet of igneous rock that has solidified in a crack or fissure in the earth's crust; a human-made structure used to control stream flow.

**DIRECTIONAL DRILLING:** The drilling of a borehole at an angle from the vertical to reach a subsurface area that is not directly beneath the point where the bit enters the earth.

**DISCHARGE (WATER):** The rate of flow or volume of water that passes a given point within a stream during given period of time. Also see INSTANTANEOUS DISCHARGE.

**DISCLIMAX:** An enduring climax community altered by human or livestock disturbance, such as a grassland that has replaced a deciduous forest. Also see CLIMAX.

**DISPERSED RECREATION:** Recreation activities that do not require developed sites or facilities.

**DISTURBANCE REGIME:** The regular pattern of occurrence or characteristic behavior of disturbance which includes type, intensity, frequency, and spatial extent.

**DIVISION FENCE:** A fence that separates pastures or allotments.

**DRAW:** A natural drainage basin or gully.

**EASEMENT:** The right to use land in a certain way granted by a landowner to a second party. Also see CONSERVATION EASEMENT.

**ECOLOGICAL CONDITION:** See ECOLOGICAL SITE RATING.

**ECOLOGICAL INTEGRITY:** The quality of a natural unmanaged or managed ecosystem in which the natural ecological processes are sustained, with genetic, species, and ecosystem diversity assured for the future.

**ECOLOGICAL NICHE:** See NICHE.

**ECOLOGICAL SITE (RANGE SITE):** A distinctive kind of land that has specific physical characteristics and that differs from other kinds of land in its ability to produce a distinctive kind and amount of vegetation.

**ECOLOGICAL SITE DESCRIPTIONS (RANGE SITE GUIDE):** Descriptions of the following characteristics of an ecological site: soils, physical features, climatic features, associated hydrologic features, plant



communities possible on the site, plant community dynamics, annual production estimates and distribution of production throughout the year, associated animal communities, associated and similar sites, and interpretations for management.

**ECOLOGICAL SITE INVENTORY:** The basic inventory of present and potential vegetation on BLM rangeland.

**ECOLOGICAL SITE RATING  
(ECOLOGICAL CONDITION/  
ECOLOGICAL STATUS):**

The present state of vegetation of an ecological site in relation to the potential natural community for the site. Independent of the site's use, the ecological site rating is an expression of the relative degree to which the kinds, proportions, and amounts of plants in a community resemble those of the potential natural community. The four ecological status classes correspond to 0-25%, 25-50%, 51-75%, or 76-100% similarity to the potential natural community and are called early-seral, mid-seral, late-seral, and potential natural community, respectively.

**ECOSYSTEM:** Organisms, together with their abiotic environment, forming an interacting system and inhabiting an identifiable space.

**ECOTOURISM:** Tourism that essentially focuses on natural rather than developed attractions with the goal of enhancing the visitor's understanding and appreciation of nature and natural features. Such tourism often attempts to be environmentally sound and to contribute economically to the local community.

**ELECTROFISHING**

**(ELECTROSHOCKING):**

A fish collection method employed by professional fishery biologists using a pulse of electricity to stun fish.

**ELIGIBLE RIVER SEGMENT:**

Qualification of a river for inclusion into the National Wild and Scenic Rivers System by determining that it is free flowing and, with its adjacent land area, has at least one river-related value considered to be outstandingly remarkable.

**EMERGENT VEGETATION:** Aquatic plant species that are rooted in wetlands but extend above the water's surface. Also see SUBMERGENT VEGETATION.

**ENDANGERED SPECIES:** Any animal or plant species in danger of extinction throughout all or a significant portion of its range as designated by the U.S. Fish and Wildlife Service under the Endangered Species Act. Also see THREATENED SPECIES.

**ENERGY FLOW:** The intake, conversion, and passage of energy through organisms or through an ecosystem.

**ENTRENCHMENT:** The process by which a stream erodes downward (incision) creating vertical, often eroding banks and abandoning its flood plain. Entrenched streams are often referred to as gullies.

**ENVIRONMENTAL ASSESSMENT (EA):** A concise public document for which a federal agency is responsible. An EA serves: (1) to briefly provide enough evidence and analysis for determining whether to prepare an environmental impact statement (EIS) or a finding of no significant impact and to aid an agency's compliance with the National Environmental Policy Act when no EIS is needed; and (2) to facilitate preparing an EIS when one is needed. Also see ENVIRONMENTAL IMPACT STATEMENT.

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### **ENVIRONMENTAL IMPACT**

**STATEMENT (EIS):** An analytical document that portrays potential impacts on the human environment of a particular course of action and its possible alternatives. Required by the National Environmental Policy Act (NEPA), an EIS is prepared for use by decision makers to weigh the environmental consequences of a potential decision. Also see ENVIRONMENTAL ASSESSMENT.

**ENVIRONMENTAL JUSTICE (EJ):** The fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income in developing, implementing, and enforcing environmental laws, regulations, and policies.

**EPHEMERAL STREAM:** A stream or portion of a stream that: (1) flows only in direct response to precipitation, (2) receives little or no water from springs or no long continued supply from snow or other sources, and (3) has a channel that is always above the water table.

**ETHNOECOLOGY:** The study of the relationship between a society and its natural environment including the spatio-temporal organization of human activities and how nature and natural resources are used (i.e., hunting, fishing, collecting, farming, preparing food); the study of how people perceive and manipulate their environments.

**EXCLOSURE:** An area fenced to exclude animals.

**EXOTIC:** An organism or species that is not native to the region in which it is found.

**EXTIRPATED SPECIES:** A locally extinct species; a species that is no longer found in a locality but exists elsewhere.

**EXTIRPATION:** See EXTIRPATED SPECIES.

**FAULT BLOCK MOUNTAINS (BLOCK MOUNTAINS):** Mountains formed by block faulting which divides the earth's crust into fault blocks of different elevations and orientations.

**FECAL COLIFORM BACTERIA:** A group of organisms found in the intestinal tracts of people and animals. Their presence in water shows pollution and possible dangerous bacterial contamination.

**FECAL STREPTOCOCCUS (STREP) BACTERIA:** Bacteria of the intestinal tract with the ability to grow at relatively high pH and temperature and used as an indicator of recent fecal pollution by warm-blooded animals, including humans.

**FEDERAL LAND POLICY AND MANAGEMENT ACT (FLPMA):** The act that: (1) set out, for the Bureau of Land Management, standards for managing the public lands including land use planning, sales, withdrawals, acquisitions, and exchanges; (2) authorized the setting up of local advisory councils representing major citizens groups interested in land use planning and management, (3) established criteria for reviewing proposed wilderness areas, and (4) provided guidelines for other aspects of public land management such as grazing.

**FEE SIMPLE TITLE:** Unrestricted ownership of real property (i.e., land and whatever is erected or growing on it).

**FINDING OF NO SIGNIFICANT IMPACT (FONSI):** A document that is prepared by a federal agency and that briefly explains why an action not otherwise excluded from the requirement to prepare an environmental impact

statement (EIS) would not significantly affect the human environment and not require an EIS.

**FINE PARTICULATE MATTER (PM<sup>2.5</sup>):** Particulate matter that is less than 2.5 microns in diameter. Also see PARTICULATE MATTER and INHALABLE PARTICULATE MATTER.

**FIRE INTENSITY:** The rate of heat release for an entire fire at a specific time.

**FIRE SUPPRESSION:** All the work of extinguishing or confining a fire, beginning with its discovery.

**FIXED STOCKING RATE:** A stocking rate that is fixed and cannot vary from season to season or year to year. Also see STOCKING RATE and VARIABLE STOCKING RATE.

**FLOODPLAIN:** Nearly level land on either or both sides of a channel that is subject to overflow flooding. Also see HUNDRED-YEAR FLOOD and HUNDRED-YEAR FLOODPLAIN.

**FORAGE:** All browse and herbage that is available and acceptable to grazing animals or that may be harvested for feed.

**FORB:** A herbaceous plant that is not a grass, sedge, or rush.

**FREE USE PERMIT:** A permit that allows the removal of timber or other resources from the public lands free of charge.

**FUEL LOAD (IN FIRE SUPPRESSION):** The oven-dry weight of fuel per unit area usually expressed in tons/acre.

**FUEL MOISTURE CONTENT (FUEL MOISTURE) (IN FIRE SUPPRESSION):**

The water content of a fuel expressed as a percentage of the fuel's oven-dry weight. For dead fuels, which have no living tissue, moisture content is determined almost entirely by relative humidity, precipitation, dry-bulb temperature, and solar radiation. The moisture content of live fuels is physiologically controlled within the living plant.

**FUNCTIONING WATERS (WILDLIFE):** A well, catchment, spring, reservoir, or other feature (human made or natural) that provides a reliable source of potable water on a year-long basis. For such a source of water to be considered functional, the quality and quantity of water must be sufficient to sustain native wildlife populations in the local area. For example, a reservoir that fills up during monsoon rains but goes dry in a few weeks is not functional from a wildlife standpoint.

**GALLERY (GALLERY FOREST):** A forest growing along a water course in a region otherwise devoid of trees.

**GENERALIST:** An organism that can survive under a wide variety of conditions and does not specialize to live under any particular set of circumstances.

**GLIDE:** A slow-moving, relatively shallow area of flowing water that lacks surface agitation or waves and approximates uniform flow and in which the slope of the water surface is roughly parallel to the overall gradient of the stream reach.

**GRASS BANK:** An unallocated allotment used as a short-term reserve forage supply where livestock from another allotment can graze during drought or in place of another allotment that has undergone fire or vegetation treatment. Also see VEGETATION TREATMENTS.

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**GRAZING CAPACITY (CARRYING CAPACITY):** The highest livestock stocking rate possible without damaging vegetation or related resources. Grazing capacity may vary from year to year or in the same area because of fluctuating forage production.

**GRAZING CYCLE:** The amount of time required for livestock to rotate completely through all the pastures in an allotment management plan.

**GRAZING PERMIT/LICENSE/LEASE:** Official written permission to graze a specific number, kind, and class of livestock for a specified period on a defined rangeland.

**GRAZING PRIVILEGES:** The use of public land for livestock grazing under permits or leases.

**GRAZING REST:** Any period during which no livestock grazing is allowed within an area.

**GRAZING SEASON:** An established period for which grazing permits are issued.

**GRAZING SYSTEM:** A systematic sequence of grazing use and nonuse of an allotment to meet multiple use goals by improving the quality and amount of vegetation.

**GROUND COVER:** See COVER.

**GROUNDWATER:** Subsurface water and underground streams that supply wells and springs. Use of groundwater in Arizona does not require a water right, but must only be “reasonable.” Groundwater is separated from surface water by the type of alluvium in which the water is found. Water in the younger, floodplain alluvium is considered surface water. Water in the older, basin-fill alluvium is considered groundwater.

**GROUP:** More than 29 people (i.e., for a recreation site in the Empire-Cienega Planning Area).

**GULLY:** A channel or miniature valley cut by concentrated runoff but through which water commonly flows only during and immediately after heavy rains or while snow is melting.

**GULLY EROSION:** The erosion process by which water flows through narrow channels and over short periods removes the soil from this narrow area to depths ranging from 1-2 feet to as much as 75-100 feet.

**GULLY PLUG: (CHECK DAM):** A low dam, built of a wide variety of material including logs, treated lumber, stone, concrete, and synthetic materials, and used to flatten the slope of the gully, dissipate the energy of moving water, and control gully erosion.

**HABITAT:** An area that provides an animal or plant with adequate food, water, shelter, and living space.

**HABITAT FRAGMENTATION:** Process by which habitats are increasingly subdivided into smaller units resulting in their increased insularity and losses of total habitat area.

**HABITAT MANAGEMENT PLAN:** A site-specific wildlife habitat plan.

**HALF-SHRUB:** A perennial plant with a woody base whose annually produced stems die each year.

**HAZARDOUS MATERIALS (HAZMAT):** An all-encompassing term that includes hazardous substances; hazardous waste; hazardous chemical substances; toxic substances; pollutants and contaminants; and

imminently hazardous chemical substances and mixtures that can pose an unreasonable risk to human health, safety, and property.

**HEADCUT:** The abrupt change in elevation at the head of a gully.

**HEADCUTTING:** The erosional process by which a gully migrates up slope by water flowing in at its head. Headcutting is characterized by an increase in depth and width and a decrease in slope.

**HEAP LEACHING:** A low-cost technique for extracting metals from ore by percolating leaching solutions through heaps of ore placed on impervious pads. This method is generally used on low-grade ores.

**HERBACEOUS:** Of, relating to, or having the characteristics of a vascular plant that does not develop woody tissue.

**HISTORIC STRUCTURE REPORT:** The documentation of the physical condition of a historic structure and measures needed to preserve it.

**HOHOKAM:** A group of North American Indians who lived between perhaps 300 BC and AD 1400 in central and southern Arizona, largely along the Gila and Salt rivers.

**HOLDING AREA (HOLDING GROUND):** An area where livestock are often held during roundups.

**HUNDRED-YEAR FLOOD:** A flood that has a 1 in 100 chance of occurring in any given year.

**HUNDRED-YEAR FLOODPLAIN:** The area flooded by a 100-year flood.

**HYDRIC:** Characterized by, relating to, or requiring an abundance of moisture.

**HYDROLOGIC CYCLE:** The circuit of water movement from the atmosphere to the earth and its return to the atmosphere through various stages or processes, such as precipitation, interception, runoff, infiltration, percolation, storage, evaporation, and transpiration.

**IGNEOUS ROCK:** Rock, such as granite and basalt, that has solidified from a molten or partially molten state.

**INCIDENT COMMANDER:** The person responsible for managing all operations in response to incidents (i.e., wildfires and other events requiring emergency action).

**INDICATORS:** Elements of the human environment affected, or potentially affected, by a change agent. An indicator can be a structural component, a functional process or an index. A key indicator integrates several system elements in such a way as to indicate the general health of that system.

**INDIVIDUAL GRAZING ALLOTMENT:** A grazing allotment on which a single permittee grazes livestock.

**INFILTRATION:** The downward entry of water into the soil or other material.

**INFRASTRUCTURE:** The set of systems and facilities that support a region or community's social and economic structures. Examples of such systems include energy, transportation, communication, education, medical service, and fire and police protection.

## *Glossary*

**INHALABLE PARTICULATE MATTER (PM<sup>10</sup>):** Particulate matter in ambient air exceeding 10 microns in diameter. Also see PARTICULATE MATTER and FINE PARTICULATE MATTER.

**INSTANTANEOUS DISCHARGE:** The volume of water that passes a given point at a particular instant of time. Also see DISCHARGE.

**INSTREAM WATER USE:** Water use within a stream channel for such purposes as navigation, recreation, fish and wildlife preservation, water quality improvement, and hydroelectric power generation.

**INSTREAM WATER RIGHT (INSTREAM FLOW WATER RIGHT):** A water right that reserves water for and protects such specific instream water uses as fish spawning and recreation. The instream water right allows water needed for these activities to be set aside and keeps later water users from appropriating water that may affect the instream activity. (Also see INSTREAM WATER USE.)

**INTEGRATED VEGETATION MANAGEMENT:** A vegetation management approach that consists of selecting and integrating treatment methods for predicted ecological, sociological, and economic effects. Where proposed for the Empire-Cienega Planning Area, this approach would allow the use of prescribed burning and chemical (mainly herbicide) applications as well as manual, mechanical, and biological treatments. Under this approach, BLM will select vegetation treatments for a particular project in response to site-specific analyses.

**INTERMITTENT STREAM:** A stream that generally flows during wet seasons, but is dry during dry seasons.

**INVASIVE SPECIES (INVADERS):** Plant species that were either absent or present only in small amounts in undisturbed portions of a specific range site's original vegetation and invade following disturbance or continued overuse.

**KEY FORAGE SPECIES:** Forage species whose use serves as an indicator of the degree of use of associated species.

**KEYSTONE SPECIES:** Species that create a special habitat on which other species depend and without which some wildlife would become severely depleted. Two examples of key stone species are beavers, which create ponds, and prairie dogs, which create burrows.

**LAND AND WATER CONSERVATION FUND:** Established by the Land and Water Conservation Fund Act, a fund that the federal government can use to acquire and develop land and water for conservation and outdoor recreation and to help states in planning for, acquiring, and developing land and water areas and facilities.

**LAND USE AUTHORIZATION:** BLM's authorizing through leases, permits, and easements of uses of the public land. Land use authorizations may allow occupancy, recreational residences and cabin sites, farming, manufacturing, outdoor recreation concessions, National Guard maneuvers, and many other uses.

**LARAMIDE OROGENY:** A series of mountain building events that affected much of western North America in Late Cretaceous and Early Tertiary periods. (The Cretaceous period ended 65 million years ago and was followed by the Tertiary period.)

**LEASABLE MINERALS:** Minerals whose extraction from federally managed land requires a lease and the payment of royalties. Leasable minerals include coal, oil and gas, oil shale and tar sands, potash, phosphate, sodium, and geothermal steam.

**LEAVE NO TRACE:** A nationwide (and international) program to help visitors with their decisions when they travel and camp on America's public lands. The program strives to educate visitors about the nature of their recreational impacts as well as techniques to prevent and minimize such impacts.

**LITTER:** The uppermost layer of organic debris on the soil surface, essentially freshly fallen or slightly decomposed vegetal material.

**LIVE FUEL MOISTURE:** See FUEL MOISTURE.

**LIVESTOCK PERFORMANCE:** The efficiency of livestock within an operation as measured by such indicators as percent calf crop, weaned calf weights, animal death rates, and cull cow weights.

**LIVESTOCK TRESPASS:** The unauthorized grazing of livestock.

**LOAM:** A soil texture class for soil material that contains 7 to 27% clay, 28 to 50% silt, and less than 52% sand.

**LOCATABLE MINERALS:** Minerals that may be acquired under the Mining Law of 1872, as amended.

**LOCATION:** The act of taking or appropriating a parcel of mineral land including the posting of notices, the recording thereof when required, and marking the boundaries so they can be readily traced.

#### **LONG-TERM MANAGEMENT AREAS**

**(LTMA)s:** Twenty-four areas established by the Land Tenure Amendment to BLM Safford District's Resource Management Plan in 1994 to be intensively managed for their multiple resource values as defined in the Federal Land Policy and Management Act of 1976. In these LTMA)s BLM will retain all public land (surface and subsurface) and may seek to acquire state and private lands. Also see RESOURCE CONSERVATION AREA.

**MACROPHYTE:** Any plant that can be seen with the unaided eye such as aquatic mosses, ferns, liverworts, and rooted plants.

**MADREAN:** Characteristic of or relating to the Sierra Madre of Mexico.

#### **MAJOR LAND RESOURCE AREAS**

**(MLRA)s:** Broad geographic areas that have a particular pattern of soils, climate, water resources, vegetation, and land use. Each MLRA in which range and forest land occur is further broken into range sites.

**MAJOR RIGHTS-OF-WAY:** Rights-of-way along which pass transmission lines (consisting of 115kV or higher) used to transmit large blocks of energy to load centers for distribution.

#### **MANAGEMENT SITUATION ANALYSIS**

**(MSA):** Step 4 in BLM's resource management planning process. An MSA describes a planning area's current public land management and suggests opportunities to better manage this land.

**MERISTEM:** The tissue or zone in a plant from which new cells are produced by cell division.

## *Glossary*

**MESOZOIC ERA:** One of the great eras of geologic time (248 million to 65 million years ago), following the Paleozoic era, preceding the Cenozoic era, and including the Triassic, Jurassic, and Cretaceous periods.

**MICROHABITAT:** The smallest unit of a habitat, like a clump of grass or a space between rocks.

**MINERAL ENTRY:** The filing of a claim on public land to obtain the right to any minerals it may contain.

**MINERALIZATION:** The processes taking place in the earth's crust resulting in the forming of valuable minerals or ore bodies.

**MINERAL MATERIALS:** Materials such as common varieties of sand, stone, gravel, pumice, pumicite, and clay that are not obtainable under the mining or leasing laws but that can be acquired under the Mineral Materials Act of 1947, as amended.

**MINERAL WITHDRAWAL:** A formal order that withholds federal lands and minerals from entry under the Mining Law of 1872 and closes the area to mineral location (staking mining claims), development, and leasing.

**MINING DISTRICT:** An area, usually designated by name, with described or understood boundaries, where minerals are found and mined under rules prescribed by the miners, consistent with the Mining Law of 1872.

**MINING PLAN OF OPERATIONS:** A plan for mineral exploration and development that a mining operator must submit to BLM for approval for all mining, milling, and bulk sampling of more than 1,000 tons and for exploration disturbing more than five acres or on special status lands, including wilderness,

areas of critical environmental concern, national monuments, national conservation areas, and lands containing proposed or listed threatened or endangered species or their critical habitat. A plan of operations must document in detail all actions that the operator plans to take from exploration through reclamation.

**MONITORING:** The collection of information to determine the effects of resource management and detect changing resource trends, needs, and conditions.

**MOSAIC:** A pattern of vegetation in which two or more kinds of communities are interspersed in patches.

**MOTORIZED TRAIL:** A designated route that allows for the use of small-wheel-based motorized vehicles such as all-terrain vehicles and motorcycles.

**MULTIPLE USE:** A combination of balanced and diverse resource uses that considers long-term needs for renewable and nonrenewable resources including recreation, wildlife, rangeland, timber, minerals, and watershed protection, along with scenic, scientific, and cultural values.

**NATIONAL AMBIENT AIR QUALITY STANDARDS (NAAQS):** The allowable concentrations of air pollutants in the ambient (public outdoor) air specified in 40 CFR 50. National ambient air quality standards are based on the air quality criteria and divided into primary standards (allowing an adequate margin of safety to protect the public health including the health of "sensitive" populations such as asthmatics, children, and the elderly) and secondary standards (allowing an adequate margin of safety to protect the public welfare). Welfare is defined as including effects on soils, water, crops, vegetation, human-made materials,



animals, wildlife, weather, visibility, climate, and hazards to transportation, as well as effects on economic values and on personal comfort and well-being.

**NATIONAL CONSERVATION AREA**

**(NCA):** A congressionally designated public land area that contains important resources and whose management objectives are: (1) to conserve and protect these resources, (2) to maintain environmental quality, and (3) to provide for present and future users within a framework of multiple use and sustained yield.

**NATIONAL ENVIRONMENTAL POLICY**

**ACT (NEPA):** The federal law, effective January 1, 1970, that established a national policy for the environment and requires federal agencies: (1) to become aware of the environmental ramifications of their proposed actions, (2) to fully disclose to the public proposed federal actions and provide a mechanism for public input to federal decision making, and (3) to prepare environmental impact statements for every major action that would significantly affect the quality of the human environment.

**NATIONAL HISTORIC PRESERVATION**

**ACT OF 1966, AS AMENDED (NHPA):** A federal statute that established a federal program to further the efforts of private agencies and individuals in preserving the Nation's historic and cultural foundations. The National Historic Preservation Act: (1) authorized the National Register of Historic Places, (2) established the Advisory Council on Historic Preservation and a National Trust Fund to administer grants for historic preservation, and (3) authorized the development of regulations to require federal agencies to consider the effects of federally assisted activities on properties included on or eligible for the National Register of Historic Places. Also see NATIONAL REGISTER OF HISTORIC PLACES.

**NATIONAL REGISTER OF HISTORIC**

**PLACES:** The official list, established by the National Historic Preservation Act, of the Nation's cultural resources worthy of preservation. The National Register lists archeological, historic, and architectural properties (i.e., districts, sites, buildings, structures, and objects) nominated for their local, state, or national significance by state and federal agencies and approved by the National Register Staff. The National Park Service maintains the National Register. Also see NATIONAL HISTORIC PRESERVATION ACT.

**NATIONAL REGISTER QUALITY**

**(CULTURAL RESOURCES):** Cultural resource properties that meet the National Register criteria and have been determined eligible for nomination to the National Register of Historic Places because of their local, state, or national significance.

**NATIONAL WILD AND SCENIC RIVERS**

**SYSTEM:** A system of nationally designated rivers and their immediate environments that have outstanding scenic, recreational, geologic, fish and wildlife, historical, cultural, and other similar values and are preserved in a free-flowing condition. The system consists of three types of streams: (1) recreation—rivers or sections of rivers that are readily accessible by road or railroad and that may have some development along their shorelines and may have undergone some impoundments or diversion in the past, (2) scenic—rivers or sections of rivers free of impoundments with shorelines or watersheds still largely undeveloped but accessible in places by roads, and (3) wild—rivers or sections of rivers free of impoundments and generally inaccessible except by trails with watersheds or shorelines essentially primitive and waters unpolluted.

## *Glossary*

**NATIVE DIVERSITY:** The diversity of species that have evolved in a given place without human influence.

**NATIVE SPECIES:** A species that is part of an area's original flora and fauna.

**NEOTROPICAL MIGRATORY BIRDS:** Birds that travel to Central America, South America, the Caribbean, and Mexico during the fall to spend the winter and then return to the United States and Canada during the spring to breed. These birds include almost half of the bird species that breed in the United States and Canada.

**NEST PARASITISM (BROOD PARASITISM):** The exploitation by one bird species of the parental behavior of another species. A nest parasite lays eggs in the nest of another bird species to be cared for by a host. The parasite benefits from saving time, energy, and survival prospects, whereas the host may suffer partial or complete loss of its own current reproduction.

**NEXT BEST PASTURE GRAZING SYSTEM:** A livestock grazing strategy under which, when the desired level of use is made in a pasture, all rested (unused) pastures are evaluated and the pasture that looks best from a grazing standpoint is used next. After the desired level of use is made of that pasture, all rested pastures are examined again and the pasture in best shape is grazed. This is a good system where rainfall patterns are spotty (e.g., the entire allotment hasn't received an equal amount of precipitation). Extremely sensitive to environmental variables, this system gives the operator the most flexibility and provides needed rest for vegetation.

**NICHE:** The role of an organism in the environment, its activities and relationships to the biotic and abiotic environment.

**NICK POINT:** A place of abrupt change in a stream gradient.

**NODE:** A point on a plant's stem from which a leaf or leaves grow.

**NONPOINT SOURCE POLLUTION (WATER):** Pollution sources that are diffuse and do not have a single point of origin or are not introduced into a receiving water body from a specific outlet. These pollutants are generally carried off the land by storm water runoff from such sources as farming, forestry, mining, urban land uses, construction, and land disposal.

**NONUSE:** An authorization that BLM issues to applicants for nonuse of grazing privileges in whole or part, usually for one grazing season.

**NO SURFACE OCCUPANCY:** A fluid mineral leasing stipulation that prohibits occupancy or disturbance on all or part of the lease surface to protect special values or uses. Lessees may explore for or exploit the fluid minerals under leases restricted by this stipulation by using directional drilling from sites outside the no surface occupancy area. Also see DIRECTIONAL DRILLING.

**NOXIOUS PLANT:** An unwanted plant specified by federal or state laws as being undesirable and requiring control. Noxious weeds are usually non-natives and highly invasive.

**NUTRIENT CYCLE:** A general term for the movement of any particular life-essential substance through the physical and biological environment. Essential nutrient cycles include those of carbon, nitrogen, oxygen, and water.

**OBLIGATE:** Essential, necessary, unable to exist in any other state, mode, or relationship.

**OFF-HIGHWAY VEHICLE (OHV):** Any vehicle capable of or designed for travel on or immediately over land, water, or other natural terrain, deriving motive power from any source other than muscle. OHVs exclude: (1) any nonamphibious registered motorboat; (2) any fire, emergency, or law enforcement vehicle while being used for official or emergency purposes; and (3) any vehicle whose use is expressly authorized by a permit, lease, license, agreement, or contract issued by an authorized officer or otherwise approved.

**OIL AND GAS SHOW:** The detectable presence of oil or gas in a borehole as determined by examining the core or cuttings.

**OIL SEEP:** A surface location where oil, having permeated its subsurface boundaries, has accumulated in small pools.

**OVERBURDEN:** All the earth and other materials that overlie a natural mineral deposit.

**OVERSTORY:** The portion of the trees in a forest stand forming the upper crown cover. Also see UNDERSTORY.

**PALEONTOLOGICAL RESOURCES:** The remains of plants and animals preserved in soils and sedimentary rock. Paleontological resources are important for understanding past environments, environmental change, and the evolution of life.

**PALEOZOIC ERA:** An era of geologic time (600 million to 280 million years ago) between the Late Precambrian and the Mesozoic eras and comprising the Cambrian, Ordovician, Silurian, Devonian, Mississippian, Pennsylvanian, and Permian periods.

**PANICULATE AGAVE:** A reference to the growth form of certain agave species, such as Palmer's agave (*Agave palmeri*) and Parry's

agave (*Agave parryi*), whose flowers are arranged on the stalk in a pyramidal, loosely branched cluster (panicle). The nectar and pollen of paniculate agaves are consumed by the lesser long-nosed bat, a federally listed endangered species.

**PARTICULATE MATTER:** Fine liquid or solid particles suspended in the air and consisting of dust, smoke, mist, fumes, and compounds containing sulfur, nitrogen, and metals. Also see FINE PARTICULATE MATTER and INHALABLE PARTICULATE MATTER.

**PASTURE:** A grazing area that is separated from other areas by fencing or natural barriers.

**PERFORMANCE:** See LIVESTOCK PERFORMANCE.

**PERENNIAL PLANT:** A plant that has a life cycle of three or more years. Also see ANNUAL PLANT.

**PERENNIAL STREAM:** A stream that flows continuously during all seasons of the year.

**PERSONAL INCOME:** The sum of wage and salary payments, other labor income, proprietors' income, rental income of persons, personal dividend and interest income, and transfer payments to persons, less personal contributions for social insurance.

**PHENOLOGY (PHENOLOGIES):** The study of periodic biological phenomena, such as flowering or seeding, especially as related to climate.

**PIPING:** See SOIL PIPING.

**PITHOUSE:** A wood and earthen structure inhabited by prehistoric American cultures.

## *Glossary*

**PLACER CLAIM:** A mining claim located on surficial or bedded deposits, particularly for gold located in stream gravels.

**PLAN OF OPERATIONS:** See MINING PLAN OF OPERATIONS.

**PLANT VIGOR:** The relative well being and health of a plant as reflected by its ability to manufacture enough food for growth and maintenance.

**PLANT SUCCESSION:** The process of vegetational development by which an area becomes successively occupied by different plant communities of higher ecological order.

**PLEISTOCENE (ICE AGE):** An epoch in the Quarternary period of geologic history lasting from 1.8 million to 10,000 years ago. The Pleistocene was an epoch of multiple glaciation, during which continental glaciers covered nearly one fifth of the earth's land.

**PLUTON:** A typically large body of igneous rock that has formed beneath the earth's surface.

**PONDING:** The formation of ponds by standing water in closed depressions. The water is removed only by deep percolation, transpiration, evaporation, or a combination of these processes.

**POOL:** A portion of a stream that has reduced current velocity and often water deeper than surrounding areas and that is frequently usable by fish for resting and cover.

**POPULATION:** A group of interbreeding organisms of the same kind occupying a particular space. A group of individuals of a species living in a certain area.

**POPULATION CRASH:** A period of heavy death and sharp decline in numbers of an animal species with strongly developed population cycles; the population decline during such a period.

**PORPHYRY COPPER:** A disseminated replacement deposit in which copper minerals occur as discrete grains and veinlets throughout a large volume of rock; a large-tonnage, low-grade copper deposit.

**POTENTIAL NATURAL COMMUNITY (PNC):** The stable biotic community that would become established on an ecological site if all successional stages were completed without human interference under present environmental conditions. The PNC is the vegetation community best adapted to fully use the resources of an ecological site.

**PRESCRIBED FIRE (BURNING):** The planned applying of fire to rangeland vegetation and fuels under specified conditions of fuels, weather, and other variables to allow the fire to remain in a predetermined area to achieve such site-specific objectives as controlling certain plant species; enhancing growth, reproduction, or vigor of plant species; managing fuel loads; and managing vegetation community types.

**PRIME FARMLAND:** As defined by the Farmland Protection Policy Act of 1981, land that has the best combination of physical and chemical characteristics for producing food, feed, fiber, forage, oilseed, and other agricultural crops with minimum inputs of fuel, fertilizer, pesticides, and labor, and without intolerable soil erosion, as determined by the Secretary of Agriculture. Prime farmland includes land with the above characteristics, but is being used to produce livestock and timber. It does not include land already in or committed to urban development or water storage. Also see UNIQUE FARMLAND.

**PRIMITIVE RECREATION:** Recreation that provides opportunities for isolation from the evidence of humans, a vastness of scale, feeling a part of the natural environment, having a high degree of challenge and risk, and using outdoor skills. Primitive recreation is characterized by meeting nature on its own terms, without comfort or convenience of facilities.

**PROPER FUNCTIONING CONDITION (RIPARIAN-WETLAND AREAS):** The condition where: (1) enough vegetation, landform, or large woody debris is present to dissipate the stream energy of high water flows, thereby reducing erosion and improving water quality; (2) sediments are filtered, bedload is captured, and floodplains develop; (3) flood water retention and ground water recharge are improved, root masses that stabilize streambanks against cutting action develop, and diverse ponding and channel characteristics are created to provide the habitat and the water depth, duration, and temperature needed for fish production, waterfowl breeding, and other uses; and (4) greater biodiversity is supported.

**PROSPECTIVELY VALUABLE FOR OIL AND GAS:** Known or believed to contain oil and gas deposits that have, or at some time in the future, proven economic value.

**PROTOHISTORY:** The period of time immediately before recorded history.

**PUBLIC DOMAIN LANDS:** Lands that are part of the original public domain and have never left federal ownership and lands in federal ownership that were acquired in exchange for public domain lands or for timber on public domain lands.

**PUBLIC LANDS:** As defined by Public Law 94-579 (Federal Land Policy and Management Act of 1976), lands and interest in land owned by the United States and administered by the

Secretary of the Interior through BLM, regardless of how the United States acquired possession. In common usage, public lands may refer to all federal land no matter what agency manages it. Also see ACQUIRED PUBLIC LANDS.

**QUARTERNARY PERIOD:** The current period of geologic history and second period of the Cenozoic era which is believed to have covered the last two to three million years.

**RANGE IMPROVEMENT:** Any activity or program on or relating to the public lands designed to improve forage production, change vegetation composition, control use patterns, provide water, stabilize soil and water conditions, or provide habitat for livestock and wildlife. Range improvements may be structural or nonstructural. A structural improvement requires placement or construction to facilitate the management or control the distribution and movement of animals. Such improvements may include fences, wells, troughs, reservoirs, pipelines, and cattleguards. Nonstructural improvements consist of practices or treatments that improve resource conditions. Such improvements include seedings; chemical, mechanical, and biological plant control; prescribed burning; water spreaders; pitting; chiseling; and contour furrowing.

**RANGELAND:** A kind of land on which the native vegetation, climax, or natural potential consists predominately of grasses, grasslike plants, forbs, or shrubs. Rangeland includes lands revegetated naturally or artificially to provide a plant cover that is managed like native vegetation. Rangelands may consist of natural grasslands, savannas, shrublands, moist deserts, tundra, alpine communities, coastal marshes, and wet meadows.

## *Glossary*

**RANGELAND ECOLOGICAL SITE:** A distinctive kind of land that has specific physical characteristics and that differs from other kinds of land in its ability to produce a distinctive kind and amount of vegetation.

**RANGE SITE:** See ECOLOGICAL SITE.

**RANGE SITE GUIDE:** See ECOLOGICAL SITE DESCRIPTIONS.

**RAPTORS:** Birds of prey.

**REACH:** A relatively homogeneous section of a stream having a repetitious sequence of physical characteristics and habitat types.

**RECHARGE:** See AQUIFER RECHARGE.

**RECOGNIZED ENVIRONMENTAL CONDITION:** The presence or likely presence of any hazardous substance or petroleum product on a property under conditions that indicate an existing or past release or a material threat of a release into the ground, groundwater, or surface water.

**RECORD OF DECISION:** A document signed by a responsible official recording a decision that was preceded by the preparing of an environmental impact statement. Also see DECISION RECORD.

**RECREATION OPPORTUNITY SPECTRUM (ROS):** A planning process that provides a framework for defining classes of outdoor recreation environments, activities, and experience opportunities. In ROS, the setting, activities, and opportunities for experiences are arranged along a spectrum of six classes: primitive, semiprimitive nonmotorized, semiprimitive motorized, roaded natural, rural, and urban. The resulting ROS analysis defines specific geographic areas on the ground, each of which encompasses one of the six classes.

**RECREATION ZONE:** A planned and delineated area with designated recreation opportunities, settings, and activities.

**RECRUITMENT:** The increase in population caused by natural reproduction or immigration.

**REFUGIUM:** An area that has remained unaffected by adverse environmental changes to the surrounding area, allowing a population to survive where others have perished.

**REPLACEMENT DEPOSIT:** A mineral deposit formed by a new mineral of partly or wholly differing chemical composition growing in the body of an old mineral or aggregate.

**RESEARCH NATURAL AREA (RNA):** A physical or biological unit in which current natural conditions are maintained insofar as possible. In RNAs, activities such as grazing and vegetation are prohibited unless they replace natural processes and contribute to protecting and preserving an area. Moreover, such recreation as camping and gathering plants is discouraged.

**RESISTANCE TO CONTROL (WILDFIRE):** The relative difficulty of building and holding a fire control line as affected by fire behavior, fuel, topography, and soil.

**RESOURCE ADVISORY COUNCILS (RACs):** Advisory councils appointed by the Secretary of the Interior and consisting of representatives of major public land interest groups (e.g., commodity industries, recreation, environmental, and local area interests) in a state or smaller area. RACs advise the Bureau of Land Management focusing on a full array of multiple use public land issues. RACs also help develop fundamentals for rangeland health and guidelines for livestock grazing.

**RESOURCE CONSERVATION AREA**

**(RCA):** A land management designation that provides management consideration to areas that have special resources but don't need the protection conferred by an area of critical environmental concern. Also see LONG-TERM MANAGEMENT AREAS.

**RESOURCE MANAGEMENT PLAN**

**(RMP):** A BLM planning document that is prepared in accord with Section 202 of the Federal Land Policy and Management Act and that presents systematic guidelines for making resource management decisions for a resource area. An RMP is based on an analysis of an area's resources, their existing management, and their capability for alternative uses. RMPs are issue oriented and developed by an interdisciplinary team with public participation.

**REST:** See GRAZING REST.

**RESTORATION (CULTURAL**

**RESOURCE):** The process of accurately reestablishing the form and details of a property or portion of a property together with its setting, as it appeared in a particular period of time. Restoration may involve removing later work that is not in itself significant and replacing missing original work. Also see STABILIZATION (CULTURAL RESOURCE).

**REST-ROTATION GRAZING:** A grazing system in which one part of the range is ungrazed for an entire grazing year or longer while other parts are grazed for a portion or all of a growing season.

**RHIZOME:** A horizontal underground plant stem that is often thickened by deposits of reserve food material, produces shoots above and roots below, and is distinguished from a true root in having buds, nodes, and usually scalelike leaves.

**RIFFLE:** Shallow rapids where water flows swiftly over completely or partially submerged obstructions to produce surface agitation, but not standing waves.

**RIGHT-OF-WAY:** A permit or easement that authorizes the use of lands for certain specified purposes, commonly for pipelines, roads, telephone lines, or powerlines.

**RIPARIAN:** Pertaining to or situated on or along the bank of streams, lakes, and reservoirs.

**RIPARIAN AREA:** A form of wetland transition between permanently saturated wetlands and upland areas. Riparian areas exhibit vegetation or physical characteristics that reflect the influence of permanent surface or subsurface water. Typical riparian areas include lands along, adjacent to, or contiguous with perennially and intermittently flowing rivers and streams, glacial potholes, and the shores of lakes and reservoirs with stable water levels. Excluded are ephemeral streams or washes that lack vegetation and depend on free water in the soil.

**ROAD PRISM:** The area of ground containing a road surface and the cut and fill slopes for the road.

**ROOT ZONE:** The part of the soil that is or can be penetrated by plant roots.

**RUN:** An area of swiftly flowing water that lacks surface agitation or waves and approximates uniform flow, and whose water surface is roughly parallel to the overall gradient of the stream reach.

**RUNOFF:** The portion of a drainage area's precipitation that flows from the area.

## *Glossary*

**SAFE YIELD:** The rate at which water can be withdrawn from a groundwater basin (aquifer) without depleting the supply so as to cause undesirable effects.

**SALABLE MINERALS:** Common variety minerals on public lands, such as sand and gravel, which are used mainly for construction and are disposed of by sales or special permits to local governments.

**SAVANNAH:** A tropical or subtropical grassland containing scattered trees and drought-resistant undergrowth.

**SCOPING:** An early and open process for determining the scope of issues to be addressed in an environmental impact statement and the significant issues related to a proposed action.

**SEASONAL GRAZING:** Grazing restricted to a specific season.

**SECTION:** 640 acres, 1 mile square.

**SECTION 404 PERMIT:** A permit required by the Clean Water Act, under specified circumstances, when dredge or fill material is placed in the waters of the United States, including wetlands.

**SECTION 7 CONSULTATION:** The requirement of Section 7 of the Endangered Species Act that all federal agencies consult with the U.S. Fish and Wildlife Service or the National Marine Fisheries Service if a proposed action might affect a federally listed species or its critical habitat.

**SEDIMENT:** Solid material that originates mostly from disintegrated rocks and is transported by, suspended in, or deposited from water. Sediment includes chemical and biochemical precipitates and decomposed organic material such as humus.

**SEDIMENTARY ROCKS:** Rocks, such as sandstone, limestone, and shale, that are formed from sediments or transported fragments deposited in water.

**SEDIMENTATION:** The process or action of depositing sediment.

**SEDIMENT LOAD (SEDIMENT DISCHARGE):** The amount of sediment, measured in dry weight or by volume, that is transported through a stream cross-section in a given time. Sediment load consists of sediment suspended in water and sediment that moves by sliding, rolling, or bounding on or near the streambed.

**SEDIMENT TRANSPORT:** The movement of mineral and organic solid materials in a stream.

**SEDIMENT YIELD:** The amount of sediment removed from a watershed over a specified period, usually expressed as tons, acre-feet, or cubic yards of sediment per unit of drainage area per year.

**SEINING:** Moving a seine (vertically hanging net) through water and bringing the two ends together to catch fish.

**SENSITIVE SPECIES:** All species that are under status review, have small or declining populations, live in unique habitats, or need special management. Sensitive species include threatened, endangered, and proposed species as classified by the U.S. Fish and Wildlife Service.

**SHARED USE TRAIL:** A trail shared for a variety of uses such as motorized and nonmotorized uses; a combination of nonmotorized uses such as hiking, horseback riding, and bicycling; or a combination of motorized uses such as dirt bikes and small and large four-wheel vehicles.



**SHIPPING PASTURE:** A small pasture in which livestock are kept for up to a week before being shipped out. Shipping pastures are preferred to corrals because of the large amount of dust that concentrated livestock can stir up in a corral.

**SHOW:** See OIL AND GAS SHOW.

**SHRINK-SWELL POTENTIAL:** The susceptibility of soil to volume change due to loss or gain in moisture content.

**SIKES ACT OF 1974:** A federal law that promoted federal-state cooperation in managing wildlife habitats on both BLM and Forest Service lands. The act required BLM to work with state wildlife agencies to plan the development and maintenance of wildlife habitats and had as its main tool the habitat management plan.

**SMOKE PERMIT:** In Arizona, a permit that an agency must obtain from the Arizona Department of Environmental Quality in order to conduct a prescribed burn. Also see PRESCRIBED FIRE.

**SOCIAL TRAIL:** An unplanned random trail made by first visitors and then followed by others.

**SOIL MOISTURE:** The water content stored in a soil.

**SOIL PIPING:** The removal of soil material through subsurface flow channels or “pipes” formed by seepage water.

**SOIL PRODUCTIVITY:** The capacity of a soil in its normal environment to produce a specified plant or sequence of plants under a specified system of management.

**SOIL STABILITY:** A qualitative term used to describe a soil’s resistance to change. Soil stability is determined by intrinsic properties such as aspect, depth, elevation, organic matter content, parent material, slope, structure, texture, and vegetation.

**SOIL STRUCTURE:** The physical constitution of soil material as expressed by size, shape, and the degree of development of primary soil particles and voids into naturally or artificially formed structural units.

#### **SONOITA VALLEY PLANNING**

**PARTNERSHIP (SVPP):** A partnership of people from federal, state, and local agencies and other interests that was formed in 1995 to work with the community on public land issues in an area of southeast Arizona, defined roughly as the Cienega Creek watershed south of Interstate 10 and small portions of the upper watersheds of Sonoita Creek and the Babocomari River. The partnership, open to anyone wishing to participate, is an outgrowth of BLM’s attempt to involve more public participation in planning for the area and to improve communication and coordination with surrounding public and private landowners.

**SPECIAL LAND USE PERMIT (SLUP):** A permit granted for purposes neither authorized nor forbidden by law.

**SPECIAL RECREATION PERMIT (SRP):** An authorization that allows for specific nonexclusive permitted recreational uses of the public lands and related waters. SRPs are issued to control visitor use, protect recreational and natural resources, provide for the health and safety of visitors, and accommodate commercial recreational uses.

## *Glossary*

**SPECIAL STATUS SPECIES:** Plant or animal species listed as threatened, endangered, candidate, or sensitive by the Federal government or state governments.

**SPLIT-ESTATE:** Land whose surface rights and mineral rights are owned by different entities. Such a condition commonly occurs when surface rights are owned by the Federal government and the mineral rights are privately or state owned.

**STABILIZATION (CULTURAL RESOURCE):** Protective techniques usually applied to structures and ruins to keep them in their existing condition, prevent further deterioration, and provide structural safety without significant rebuilding. Capping mud-mortared masonry walls with concrete mortar is an example of a stabilization technique. Also see RESTORATION (CULTURAL RESOURCE).

**STABILIZATION (SOIL):** Chemical or mechanical treatment to increase or maintain the stability of a mass of soil or otherwise improve its engineering properties.

**STANDARDS AND GUIDELINES FOR RANGELAND HEALTH:** See ARIZONA STANDARDS FOR RANGELAND HEALTH AND GUIDELINES FOR GRAZING ADMINISTRATION.

**STAGING AREA:** An area where participants in an activity gather and make final preparations for the activity.

**STAMP:** A machine for crushing ore, used particularly in gold milling.

**STATE HISTORIC PRESERVATION OFFICER (SHPO):** The official within and authorized by each state at the request of the

Secretary of the Interior to act as liaison for the National Historic Preservation Act. Also see NATIONAL HISTORIC PRESERVATION ACT.

**STATE LANDS:** See STATE TRUST LANDS.

**STATE TRUST LANDS:** Lands granted to Arizona by the Federal government at territorial establishment and at statehood. Totaling 9.4 million acres, these lands are managed by the Arizona State Land Department to yield revenue over the long-term for the 14 trust beneficiaries. The chief beneficiary consists of the public schools. Whenever Arizona sells or leases these lands and their natural resources, it must pay the beneficiaries. Revenues from land sales are maintained in a permanent fund managed by the State Treasurer and interest from this fund is paid to the beneficiaries.

**STOCKING RATE:** The number of specific kinds and classes of animals grazing or using a unit of land for a specific time period. Stocking rates may be expressed as a ratio, such as of animal units/section, acres/animal unit, or acres/animal unit month. Also see CONSERVATIVE STOCKING RATE and FIXED STOCKING RATE.

**STOCK TANK (POND):** A water impoundment created by building a dam, digging a depression, or both, to provide water for livestock or wildlife.

**STREAMBANK:** The portion of a stream channel that restricts the sideward movement of water at normal water levels. The streambank's gradient often exceeds 45° and exhibits a distinct break in slope from the stream bottom.

**STREAMBANK STABILITY:** A streambank's relative resistance to erosion which is measured as a percentage of alteration to streambanks.

**SUBECONOMIC:** Lacking economic importance; not justifiable solely on economic grounds.

**SUBIRRIGATED SOILS:** Streamside soils into whose root zone the water table rises.

**SUBMERGENT VEGETATION:** Aquatic plants that grow only within water and do not break the water's surface. Also see EMERGENT VEGETATION.

**SUBSTRATE:** (1) Mineral and organic material forming the bottom of a waterway or water body; (2) The base or substance upon which an organism is growing.

**SUBWATERSHED:** A watershed subdivision of unspecified size that forms a convenient natural unit.

**SUCCESSION:** See PLANT SUCCESSION.

**SUCCULENTS:** Plants such as cacti that have fleshy tissues designed to conserve moisture.

**SUPPLEMENTAL FEED:** Concentrates or harvested feed that is fed to livestock to correct the deficiencies of a range diet.

**SURFACE OCCUPANCY:** See NO SURFACE OCCUPANCY.

**SUSTAINED YIELD:** Achieving and maintaining a permanently high level, annual or regular period production of renewable land resources without impairing the productivity of the land and its environmental values.

**SWALE:** A commonly wet or moist low-lying or depressed land area.

**TAILINGS:** The waste matter from ore after the extraction of economically recoverable metals and minerals.

**TAKE:** As defined by the Endangered Species Act, "to harass, harm, pursue, hunt, shoot, wound, kill, capture, or collect, or attempt to engage in any such conduct."

**TARGET SPECIES:** Plant species to be reduced or eliminated by a vegetation treatment. Also see VEGETATION TREATMENTS.

**TERRESTRIAL SPECIES:** Ground-dwelling plants and animals.

**TERTIARY PERIOD:** The earlier (65 million to 1.8 million years ago) of the two geologic periods in the Cenozoic era of geologic time.

**THREATENED SPECIES:** Any plant or animal species likely to become endangered within the foreseeable future throughout all or a part of its range and designated by the U.S. Fish and Wildlife Service under the Endangered Species Act. Also see ENDANGERED SPECIES.

**TRAILHEAD:** The terminus of a hiking, horse, or bicycle trail accessible by motor vehicle and sometimes having parking, signs, a visitor register, and camping and sanitary facilities.

**TRANSITIONAL PATHWAYS:** The processes that cause a shift from one vegetation state to another.

**TRAVERTINE:** A mineral consisting of calcium carbonate deposited by spring waters.

**TREAD LIGHTLY:** A not-for-profit organization whose mission is to increase awareness of ways to enjoy the great outdoors while minimizing human impacts.

**TUCSON ACTIVE MANAGEMENT AREA (AMA):** One of five such active management areas in Arizona established under the 1980 Groundwater Management Code. Covering 3,866 mi<sup>2</sup> in southeast Arizona, this AMA includes portions of Pima, Pinal, and Santa Cruz counties and five incorporated cities and towns: Tucson, South Tucson, Oro Valley, Marana, and Sahuarita. Also within the AMA are the Pasqua Yaqui tribal lands and part of the Schuk Toak District and the entire San Xavier District of the Tohono O'odham Nation. The Tucson AMA has a statutory goal of achieving safe yield (groundwater pumped from the aquifer not exceeding aquifer recharge) by the year 2025. Also see ACTIVE MANAGEMENT AREA.

**TURBIDITY:** Cloudiness of water measured by how deeply light can penetrate it from the surface. Highly turbid water is often called “muddy” although all kinds of suspended particles contribute to turbidity.

**UNAUTHORIZED USE:** Any use of the public lands not authorized or permitted.

**UNDERSTORY:** Plants growing under the canopy of other plants. Understory usually refers to grasses, forbs, and low shrubs under a tree or brush canopy. Also see OVERSTORY.

**USEABLE FORAGE:** That portion of the forage that can be grazed without damage to the basic resources; may vary with season of use, species, and associated species.

**UNGULATES:** Hoofed animals including ruminants but also horses, tapirs, elephants, rhinoceroses, and swine.

**UNIQUE FARMLAND:** As defined by the Farmland Protection Policy Act of 1981, land other than prime farmland that is used for producing specific high-value food and fiber crops, as determined by the Secretary of

Agriculture. Unique farmland has the special combination of soil quality, location, growing season, and moisture supply needed to economically produce sustained high quality or high yields of specific crops when treated and managed according to acceptable farming methods. Examples of such crops include citrus, tree nuts, olives, cranberries, fruits, and vegetables. Also see PRIME FARMLAND.

**UNIQUE WATER:** A water body determined by the Arizona Department of Environmental Quality as an outstanding water resource of the state because of exceptional recreational or ecological significance, such as important geology, flora, fauna, water quality, aesthetic values, or wilderness characteristics.

**UPLANDS:** Lands at higher elevations than the alluvial plain or low stream terrace; all lands outside the riparian-wetland and aquatic zones.

**URBAN INTERFACE (WILDLAND-URBAN INTERFACE):** The line, area, or zone where structures and other human development meet or intermingle with undeveloped wildland or vegetative fuels. This interface creates conflicts and complicates fighting wildfires and conducting prescribed burns.

**UTILIZATION (FORAGE):** The proportion of the current year's forage consumed or destroyed by grazing animals. Utilization is usually expressed as a percentage.

**VALID EXISTING RIGHTS:** Locatable mineral development rights that existed when the Federal Land Policy and Management Act (FLPMA) was enacted on October 21, 1976. Some areas are segregated from entry and location under the Mining Law to protect certain values or allow certain uses. Mining claims that existed as of the effective date of the segregation may still be valid if they can meet the test of discovery of a valuable mineral

required under the Mining Law. Determining the validity of mining claims located on segregated lands requires BLM to conduct a valid existing rights determination.

**VANDALISM (CULTURAL RESOURCE):**

The unauthorized collecting, excavating, or defacing of cultural resources.

**VARIABLE STOCKING:** The practice of varying the stocking rate through the plant growing season with the objective of using forage at a rate similar to its growth rate. The stocking rate can be varied either by varying the number of animals in a set area or varying the acreage offered to a set number of animals. Also see STOCKING RATE and FIXED STOCKING RATE.

**VASCULAR PLANT:** A plant in the phylum Tracheophyta, which includes spermatophytes (seed plants) and pteridophytes (ferns and related plants).

**VEGETATION STATES:** The different plant communities produced by an ecological site.

**VEGETATION STRUCTURE:** The composition of an area's vegetation--plant species, growth forms, abundance, vegetation types, and spatial arrangement.

**VEGETATION TREATMENTS:** Treatments that improve vegetation condition or production. Such treatments may include seedings; prescribed burning; or chemical, mechanical, and biological plant control.

**VEGETATION TYPE:** A plant community with distinguishable characteristics.

**VIABILITY:** The capability of living, developing, growing, or germinating under favorable conditions.

**VIEWSHED:** The entire area visible from a viewpoint.

**VISITOR DAY:** 12 visitor hours which may be aggregated continuously, intermittently, or simultaneously by one or more people.

**VISUAL ASPECT:** The visual first impression of vegetation at a particular time or seen from a specific point.

**VISUAL RESOURCE MANAGEMENT**

**(VRM):** The planning, design, and implementing of management objectives to provide acceptable levels of visual impacts for all BLM resource management activities.

**VISUAL RESOURCE MANAGEMENT**

**(VRM) CLASSES:** Classes with specific objectives for maintaining or enhancing scenic quality including the kinds landscape modifications that are acceptable to meet the objectives.

**Class I:** (Preservation) provides for natural, ecological changes only. This class includes wilderness areas, some natural areas, some wild and scenic rivers, and other similar sites where landscape modification should be restricted.

**Class II:** (Retention of the landscape character) includes areas where changes in any of the basic elements (form, line, color, or texture) caused by management activities should not be evident in the characteristic landscape.

**Class III:** (Partial retention of the landscape character) includes areas where changes in the basic elements caused by management activities may be evident in the characteristic landscape. But the changes should remain subordinate to the existing landscape character.

## *Glossary*

**Class IV:** (Modification of the landscape character) includes areas where changes may subordinate the original composition and character. But the changes should reflect what could be a natural occurrence in the characteristic landscape.

**WARM-SEASON PLANTS:** Plants whose major growth occurs during the spring, summer, or fall and that are usually dormant in winter. Also see COOL-SEASON PLANTS.

**WATER BAR:** A low ridge of dirt, rock, or other material placed across a trail or dirt road on a hill to divert flowing water and protect the trail or road from erosion.

**WATERSHED (CATCHMENT):** A topographically delineated area that is drained by a stream system, that is, the total land area above some point on a stream or river that drains water past that point. The watershed is a hydrologic unit often used as a physical-biological unit and a socioeconomic-political unit for planning and managing natural resources. Because this plan does not cover the entire watershed for Cienega Creek, the term is used for that portion under BLM management.

**WATERSHED CONDITION (WATERSHED HEALTH):** The comparison of watershed processes to normal or expected measurements of properties such as soil cover, erosion rate, runoff rate, and groundwater table elevation; an assessment or categorization of an area by erosion conditions, erosion hazards, and the soil moisture/temperature regime.

**WATERSHED FUNCTION:** The combination of processes attributed to watersheds as part of the hydrologic cycle including interception of rain by plants, rocks, and litter; surface storage by the soil; groundwater storage; stream channel storage; soil evaporation; plant transpiration; and runoff. These processes affect the

following properties of the watershed: runoff rate, water infiltration rate, soil building rate, soil erosion rate, groundwater recharge rate, groundwater discharge rate, water table elevation, and surface water discharge. These properties in turn affect plant communities through soil attributes, including soil parent material, soil moisture, and nutrients; stream and rivers through flooding duration and magnitude, as well as sediment load, which structures the dimension, pattern, and profile of channels; and lakes and reservoirs through sedimentation and nutrient input.

**WEED:** Any plant that interferes with management objectives. A weed may be native or non-native, invasive or passive, or non-noxious.

**WEED MANAGEMENT AREAS (WMAs):** Partnerships of public land managers and private land owners formed to support and coordinate the attacking of noxious weeds in a watershed or general infestation area.

**WETLAND:** An area that is inundated or saturated by surface or ground water often and long enough to support and that under normal circumstances supports a prevalence of vegetation typically adapted for life in saturated soil. Wetlands include marshes, shallows, swamps, lake shores, bogs, muskegs, wet meadows, estuaries, cienegas, and riparian areas.

**WILDCAT ROAD:** A non-permitted road on federally managed land.

**WILDFIRE:** Any wildland fire that is not meeting management objectives and therefore requires a suppression response.

**WILDLIFE:** A broad term that includes birds, reptiles, amphibians, and non-domesticated mammals.

**WING FENCE:** Fencing extending out from a corral and serving to help funnel livestock into the corral.

**WITHDRAWAL:** See MINERAL WITHDRAWAL.

**WULFENITE (YELLOW LEAD ORE):** A mineral ( $\text{PbMoO}_4$ ) sometimes with calcium, chromium, or vanadium; an ore of molybdenum.

**XERO-RIPARIAN:** ~~A streamside area~~ **An area in a drainage** that supports plant species more characteristic of uplands than wetlands, but that is more densely vegetated than areas removed from the **drainage** stream course. **Any** flows in these channels are characteristically ephemeral **but water may also be subsurface and the drainage may not flow.**

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# ABBREVIATIONS

**ACEC:** Area of critical environmental concern

**ADEQ:** Arizona Department of Environmental Quality

**ADES:** Arizona Department of Economic Security

**ADWR:** Arizona Department of Water Resources

**AGFD:** Arizona Game and Fish Department

**AMA:** Active management area

**AMP:** Allotment management plan

**ARS:** Agricultural Research Service

**ASLD:** Arizona State Land Department

**AUM:** Animal unit month

**BLM:** Bureau of Land Management  
(U.S. Department of the Interior)

**cfs:** Cubic feet per second

**CRPP:** Cultural resource project plan

**CYL:** Cattle year-long

**HMP:** Habitat management plan

**LTMA:** Long-term management area

**MLRA:** Major land resource area

**NCA:** National Conservation Area

**NRCS:** Natural Resources Conservation Service  
(U.S. Department of Agriculture)

**OHV:** Off-highway vehicle

**PFC:** Proper functioning condition

**PNC:** Potential natural community

**RAC:** Resource advisory council

**RACE:** Riparian Area Condition Evaluation

**RAWS:** Remote Automated Weather Station

**RMP:** Resource management plan

**RRT:** Rangeland resource team

**SRP:** Special recreation permit

**T&E:** Threatened and endangered

**UA:** University of Arizona

**USGS:** United States Geological Survey

**USFS:** United States Forest Service

**VRM:** Visual resource management

**WMA:** Weed management area

**WSR:** Wild and scenic river